

by this Response.

### IN THE CLAIMS

Please cancel without prejudice claims 5 and 6.

Please add claims 10-12 as follows:

B<sub>1</sub>

10. (New) A composite squirrel cage rotor, comprising:

a rotating shaft;

a polymer resin body disposed upon said shaft;

a powder having a high magnetic permeability, said powder being uniformly

5 distributed throughout said polymer resin body;

a plurality of squirrel cage conductor bars positioned axially around a periphery of  
said polymer resin body, said conductor bars being partially embedded in said polymer  
resin body, said conductor bars being formed of a material having a high electric  
conductivity;

10 a plurality of axial slots, said axial slots formed between said conductor bars; and

cooling bodies disposed within said axial slots, said cooling bodies fixedly  
retained within said axial slots by said polymer resin body, said cooling bodies dissipating  
heat generated in the composite squirrel cage rotor.

B<sub>1</sub>  
cont

11. (New) The composite squirrel cage rotor of claim 10, wherein said polymer resin body is injection molded.

12. (New) A composite squirrel cage rotor, comprising:

a rotating shaft;

an inner core disposed on said shaft, said inner core having a high magnetic permeability;

5 a polymer resin body disposed upon said inner core;

a powder having a high magnetic permeability, said powder being uniformly distributed throughout said polymer resin body;

10 a plurality of squirrel cage conductor bars positioned axially around a periphery of said polymer resin body, said conductor bars being partially embedded in said polymer resin body, said conductor bars being formed of a material having a high electric conductivity;

a plurality of axial slots, said axial slots formed between said conductor bars;

15 cooling bodies disposed within said axial slots, said cooling bodies fixedly retained within said axial slots by said polymer resin body, said cooling bodies dissipating heat generated in the composite squirrel cage rotor.